Navy Technology Validation (Techval) Monitoring Results

Techval

Energy Efficient Technologies for Government Buildings – New And Retrofits

Second Industry Workshop

January 19 & 20, 2006

Chicago IL

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Port Hueneme CA

Navy Energy Techval

Techval Web Site Features

- Explains Navy Techval Program
- Describes past and current demonstration projects
- Provides for on-line submission of project proposals
- On-line nomination of sites for projects
- On-line comments and voting for both TWG
- Tracking of projects as they happen
- Technology Reports Section
- Tech Assist

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http://techval-energy.nfesc.navy.mil

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CURRENT PROJECTS

- 90 ton chiller comp. with mag. bearings and integral VFD
  - *NUWC Newport RI*
  - *NRSW San Diego CA*
- Wrap around heat pipe for humidity control
  - *NS Pearl Harbor HI*
  - *NAS Pensacola FL*
- Duct Sealants
  - *NSA Orlando FL*
  - *NS Newport RI*
  - *NSY Puget Sound WA*
  - *NB San Diego CA*
- Cool Roof reflective roof coating
  - *NS Pearl Harbor HI*
- EER+ Retrofit
  - *NSWC Corona CA*
  - *NB San Diego CA*
  - *NWS Yorktown VA*
  - *NAWC China Lake CA*
- Spectrally Enhanced Lighting
  - *NBVC Port Hueneme CA*

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COMPLETED PROJECTS

- Power conditioner
  - *SUBASE New London CT*

- Fuel oil fired 30KW Microturbine with boiler feed water pre-heat.
  - *SUBASE New London CT*

- Thermal destratifier for high bay warehouses and hangers
  - *NSWC Crane IN*
  - *NSWCCD West Bethesda MD*

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TECHNOLOGY REPORTS

- Power Conditioner
- Micro Turbine
- Thermal Destratifier
- Internal Storm Window
- Super T8 Lighting
- Day Lighting
- Vending Machine Power Control
- Airfield LED Lighting
- VSD Chiller
- Photo Luminescent Exit Signs

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Selected Technologies For FY06

- **Premium Air Filters –**
- **Boiler Combustion Control –**
- **Smart Ventilation Control–**
- **Sand Filters –**

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90 ton chiller compressor with magnetic bearings and integral VFD

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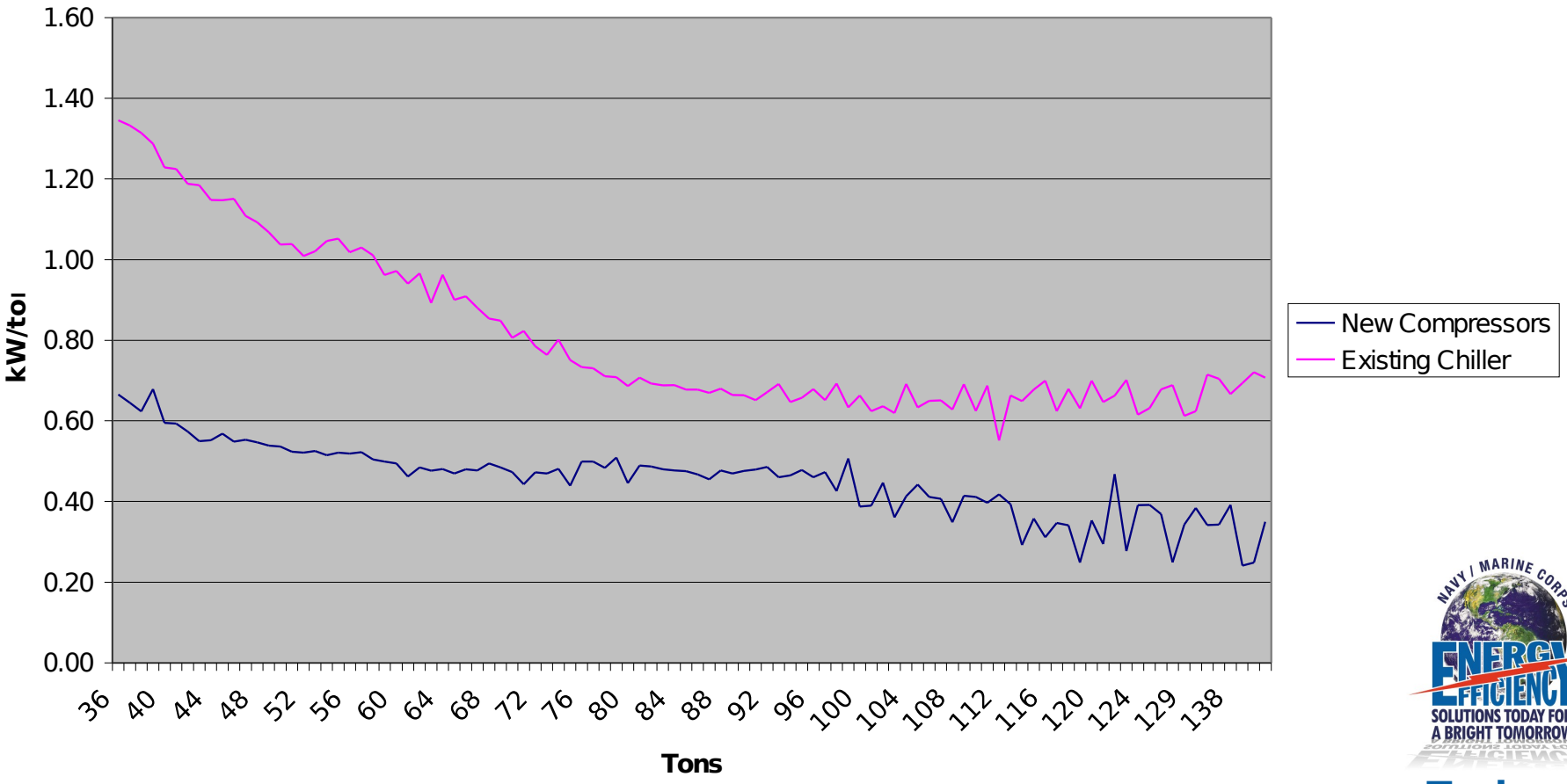
GRAPH NUMBER 6
AVERAGE OF ALL DATA POINTS AT SAN DIEGO CA
kW/ton VS LOAD NEW COMPRESSORS VS OLD CHILLER



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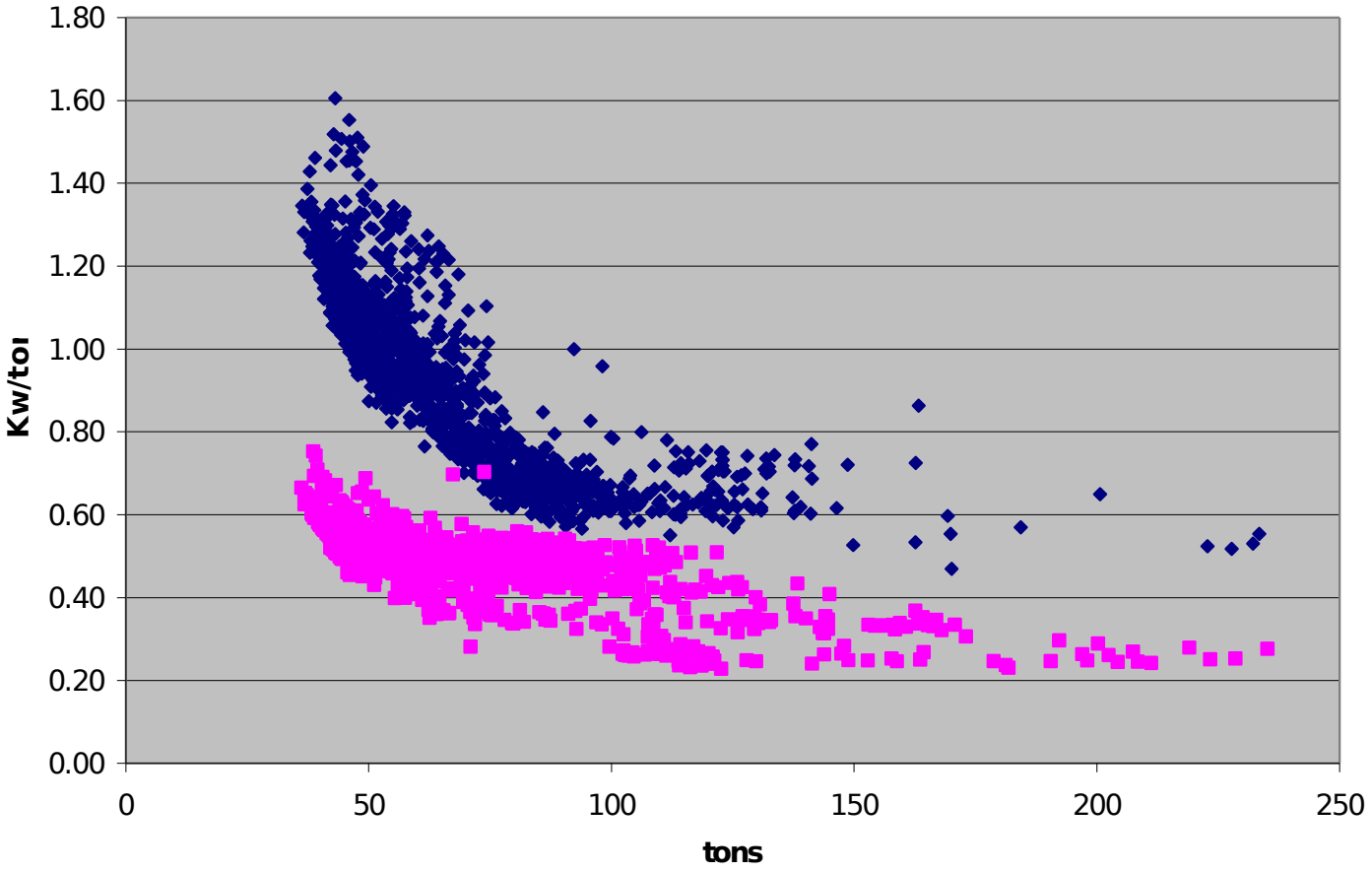
GRAPH NUMBER 5
ALL DATA POINTS FOR SAN DIEGO CA
Kw/TON VS LOAD FOR NEW COMPRESSORS VS OLD CHILLER



NAVY / MARINE CORPS ENERGY EFFICIENCY SOLUTIONS TODAY FOR A BRIGHT TOMORROW

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90 ton chiller compressor with magnetic bearings and integral VFD

NUWC Newport RI

NAVY / MARINE CORPS
ENERGY EFFICIENCY
SOLUTIONS TODAY FOR A BRIGHT TOMORROW

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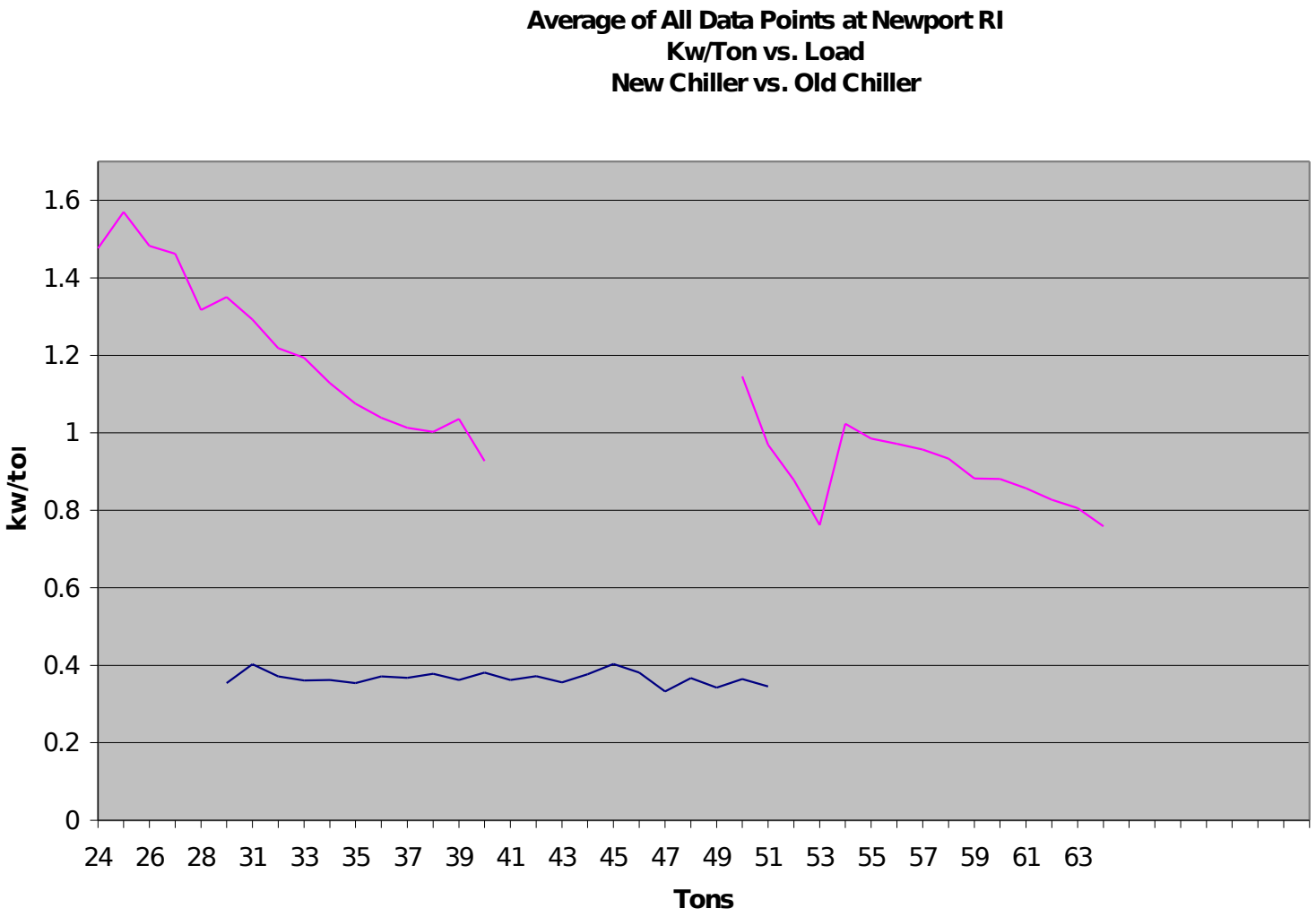

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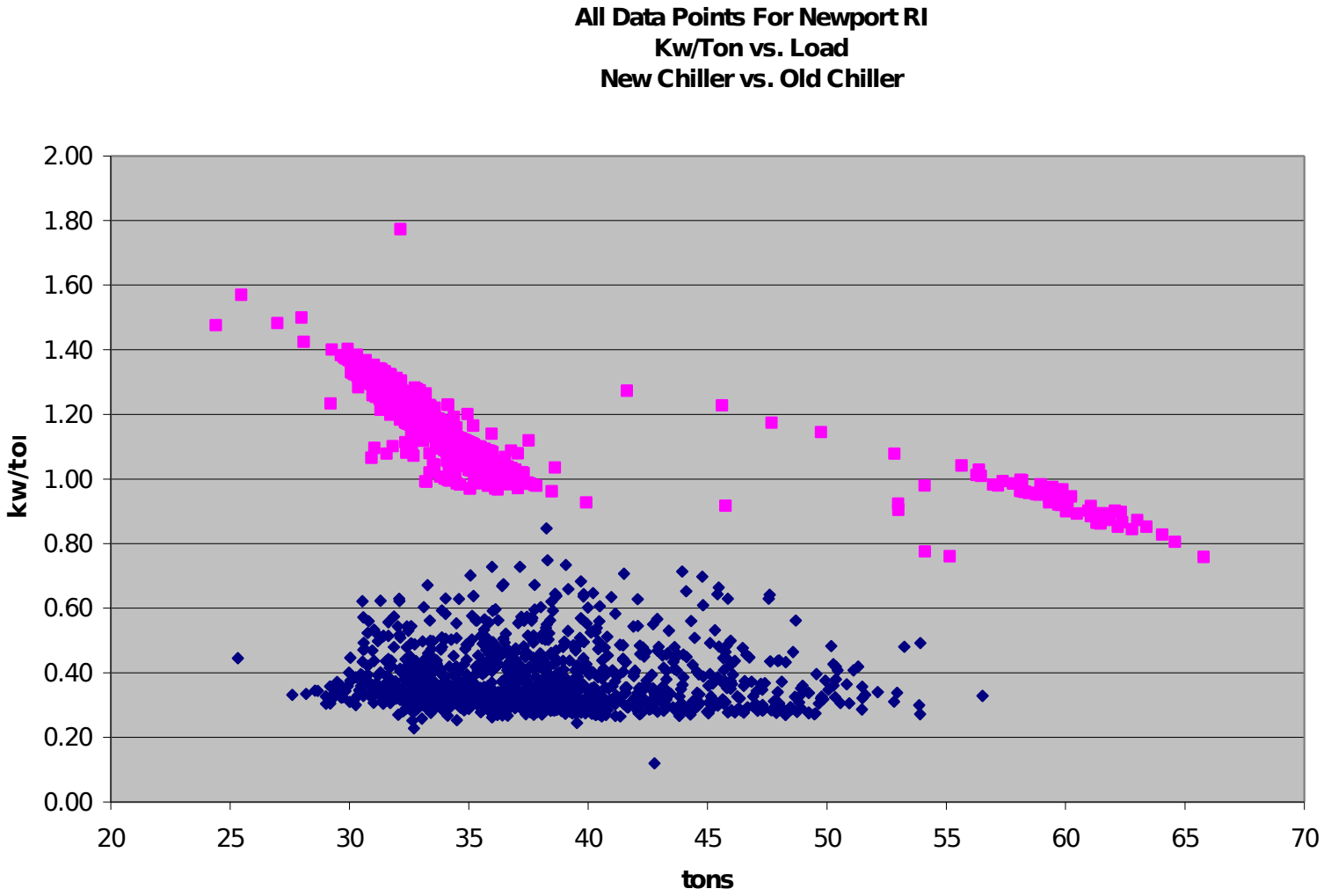

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